

REMARKS

As a preliminary matter, the Title of the Invention stands objected to as not being descriptive. Accordingly, Applicants have amended the Title to overcome the outstanding objection. Reconsideration and withdrawal in light of this Amendment are respectfully requested.

As a second preliminary matter, Figures 1-5 of the present Application stand objected to for not being designated with the legend "Related Art," because only that which is old is illustrated by these Figures. Applicants point out to the Examiner, however, that all five Figures all already contain the legend "Prior Art" which is the most commonly-used legend for designating such admitted prior art by the Applicants. Accordingly, this objection should be withdrawn.

As a third preliminary matter, although claim 54 has just been withdrawn from consideration by the Examiner in the outstanding Office Action, Applicants respectfully submit that claim 54 is, at the very least, an appropriate species claim under independent claim 50, and should therefore be equally considered with this Application, and allowed upon any allowance of independent claim 50.

Claims 50 and 57 stand rejected under 35 U.S.C. 102(e) as being anticipated by Akimoto et al. (U.S. 6,329,973). Applicants respectfully traverse this rejection because Applicants submit that the cited reference does not disclose (or suggest) a display device which can both carry out a hold control over a still image, and carry out an impulse control over a moving image, as in claim 50 of the present invention, as amended.

Akimoto discloses a display device, which includes a moving picture display area and a still picture display area. (See Fig. 3). Applicants submit that Akimoto fails to teach or suggest how to carry out a hold control over a still picture display area while carrying out an impulse control over a moving picture display area. Applicants further submit that Fig. 3 of Akimoto shows that a still picture on the still picture display area for the third row, for example, cannot be displayed under hold control without also being influenced by impulse control, which displays a moving picture on the adjacent moving picture display area. In other words, Applicants maintain that Akimoto teaches to display both the still picture display area and the moving picture display area at the same time using a single driving method. This single driving method can be hold control or impulse control, but not both, as shown in Akimoto.

In contrast, claim 50 of the present invention recites, among other things, a display device having hold control which is carried out when a display image is a still image, and having impulse control which is carried out when the display image is a moving image. Applicants submit that these features of the present invention are different from Akimoto. Akimoto is drawn toward a device for dividing an image frame into a moving picture display area and a still picture display area, while increasing the rewriting speed by reducing the frequency of writing the still picture data, which varies less than the moving picture data.

The present invention, on the other hand, features a device for judging whether an entire frame, defined as the display data displayed within one frame period, is a still picture or a moving picture, and then carrying out hold driving or impulse driving according

to the determination for the entire frame. Accordingly, the present invention thus features a dual driving system, which is different from the single driving system taught by Akimoto. For at least the foregoing reasons, the Section 102 rejection of claim 50 based on Akimoto is respectfully traversed.

Claim 57 depends from independent claim 50, and therefore includes all the features of the base claim, plus additional features. Accordingly, the Section 102 rejection of claim 57 based on Akimoto is respectfully traversed for at least the reasons discussed above in traversing the rejection of independent claim 50.

Claims 51-52 and 58 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto in view of Matsuzaki et al. (U.S. 5,644,332). Applicants respectfully traverse this rejection for at least the reasons discussed above. Claims 51-52 and 58 all depend from independent claim 50. Applicants further traverse as follows.

Applicants resubmit that Akimoto neither discloses nor suggests the present invention, as discussed above. Matsuzaki also fails to disclose or suggest the present invention by only teaching to switch display modes of a display device according to address data, and not image data, which is featured in the present invention.

The Examiner asserts on Page 6 of Paper No. 10 that Matsuzaki teaches to switch to an impulse control (for a moving image) once the display data exceeds a predetermined value. (See col 8, lines 13-17). In fact, Matsuzaki teaches nothing of the sort. First, one skilled in the art is apprised that the “scroll display mode” taught by Matsuzaki is not the same as the impulse control function featured in the present invention.

A scroll display mode alone simply cannot encompass all of the features required to display a moving image, as in the present invention.

Furthermore, Matsuzaki teaches to switch to this scroll display mode only when a total number of scan lines and the count value of the counter are both larger than a predetermined number. Those skilled in the art are further well apprised that the scanning lines and counter values taught by Matsuzaki are merely address data, which is used for selecting lines to display pixel data. Such address data is known to be different than display pixel image data itself. Accordingly, the Section 103 rejection based on a combination of Akimoto and Matsuzaki is further respectfully traversed for these additional reasons.

Claim 53 of the present invention stands rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto in view of Numao (U.S. 5,103,328). Applicants respectfully traverse this rejection for at least the reasons discussed above. Claim 53 depends from independent claim 50 of the present invention. Neither of the cited references, alone or in combination, disclose or suggest the features of the present invention which switch the hold control and the impulse control from one to the other depending on the image to be displayed.

Claims 55 and 56 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto in view of Terasaki (U.S. 5,844,540). Applicants respectfully traverse this rejection for at least the reasons discussed above. Claims 55 and 56 both depend either directly or indirectly from independent claim 50 of the present invention. Applicants further traverse as follows.

As discussed above, neither of the cited references discloses or suggests, alone or in combination, the features of the present invention which switch the hold control and the impulse control from one to the other depending on the image to be displayed. Applicants further submit that Terasaki fails to teach or suggest that brightness of the backlight is increased in impulse control as recited in claim 55 of the present invention. In fact, Terasaki does not suggest that the brightness of a moving image and the still image can be adjusted differently from one another, as asserted by the Examiner on Page 8 of Paper No. 10.

Terasaki specifically teaches that PWM dimming is applied both to still images and video images equally. (See col. 28, lines 29-31). Terasaki even further teaches that the “same effect” is achieved in both of the still and video display areas by the same single florescence tube, which acts on both areas simultaneously. (See col. 28, lines 33-38). Terasaki therefore expressly teaches away from the present invention by requiring identical treatment of both of the display areas, which are also treated simultaneously by the same fluorescent lighting source. A reference which teaches away from the present invention cannot be appropriately cited as the basis for a rejection based on obviousness. Accordingly, for these additional reasons as well, the Section 103 rejection of claims 55 and 56 based on a combination of Akimoto and Terasaki is respectfully traversed.

Claim 60 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto in view of Kamikura et al. (U.S. 6,266,370). Applicants respectfully traverse this rejection for at least the reasons discussed above. Claim 60 depends from independent claim 50 of the present invention. Applicants further traverse as follows.

Kamikura teaches both discrete cosign transformation and motion detection/compensation. (See Fig. 1). Kamikura, however, fails to teach or suggest that a display image is judged to be a moving image when compressed image information includes vector information indicating image motion, as recited in claim 60 of the present invention. Picking and choosing only some selective features of the present invention is an insufficient basis for forming a Section 103 obviousness rejection. The Examiner is required under Section 2143.03 of the MPEP to cite where all of the features of the present invention are taught and/or suggested by the cited prior art of reference. Accordingly, because Kamikura fails to teach or suggest the judging features of claim 60 of the present invention, or the information upon which such judging is based, the Section 103 rejection is respectfully traversed for these additional reasons as well.

For all the foregoing reasons, Applicants submit that this Application, including claims 50-53, 55-58, and 60, is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned Attorney if an interview would expedite prosecution.

Respectfully submitted,

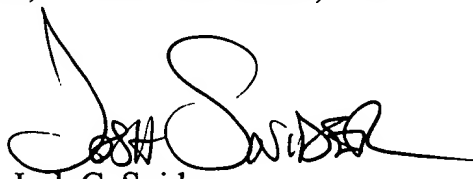
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